ABSTRACT

The present invention provides a method of separating substances utilizing a solid phase wherein a substance fixed to a solid phase can be easily separated without the application of a chemical process, biochemical process, exposure to light, electrical excitation, or the like. Disclosed is a method of separating a reaction product generated by the reaction of a first substance and a second substance comprising the steps of: (a) mixing the first substance with a temperature-sensitive carrier residing in a liquid-phase state; (b) fixing an anchor region of the first substance to the temperature-sensitive carrier by converting the temperature-sensitive carrier to a solid-phase state by changing the temperature of the reaction system; (c) generating a reaction product by reacting the second substance with a reaction region of the first substance that is fixed to the temperature-sensitive carrier; (d) removing impurities from the reaction system; and (e) releasing the anchor region of the reaction product from the temperature-sensitive carrier by converting the temperature-sensitive carrier to a liquidphase state by changing the temperature of the reaction system.